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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/614,887

07/09/2003

So Hyun Park

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EXAMINER

DOAN, KIET M

ART UNIT

PAPER NUMBER

2617

MAIL DATE

DELIVERY MODE

08/08/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

**Office Action Summary**

Application No.

10/614,887

Applicant(s)

PARK, SO HYUN

Examiner

Kiet Doan

Art Unit

2617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 15 May 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-6, 8-15, 17-21, 23-30 and 32-38 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6, 8-15, 17-21, 23-30 and 32-38 is/are rejected.
- 7) ☒ Claim(s) 10 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

1. This office action is response to Remarks file on 05/15/2007.

Claims 6-7, 16, 22, 31 are cancelled.

Claims 1-4, 8-10, 12-13, 15, 17, 19-21, 24-25, 30, 33 and 34 are amended.

#### *Allowable Subject Matter*

2. Claim 10 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### *Claim Rejections - 35 USC § 103*

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 1, 12, 21, 30** are rejected under 35 U.S.C. 103(a) as being unpatentable over Andersson et al. (US 6,693,894 B1).

Consider **claims 1, 12, 21, 30**. Andersson a method of forwarding packet calls in mobile communication system, comprising:

determining whether a called subscriber is a subscriber of a call-forwarding service and has set up a call-forwarding unconditional function in response to a packet call set-up request (C1, L25-55, Fig.1 Illustrate and teach calling party using VOIP call directed to called party and Home mobile network in step106 determine and set up call-forwarding and further C3, L5-63 teach directed forwarding/routing call); and

setting up a packet call directed to a first IP address of the called subscriber for forwarding to a forward to a second IP address based on a result of said determining (C1, L26-34, C4, L5-10 and C8, L22-31 teach "calling party" as read on first IP address forwarding call to "called party" as read on second IP address wherein using IP network, since Andersson teach the routing call but silent on a first IP address and second IP address. However, the communication between "calling party" and "called party" is connected using IP network therefore, the office interpreted each of calling party and called party obtain own IP address).

Therefore, it would have been obvious at the time that the invention was made that person having ordinary skill in the art to modify Andersson system, such that determine and setup call forwarding and directed to a first IP address of the called subscriber for forwarding to a forward to a second IP address based on a result of said determining to provide means for saving cost when using internet protocol address transfer/forward call.

4. **Claims 2-5, 8, 9, 11, 14, 15, 17-20, 23, 32** are rejected under 35 U.S.C. 103(a) as being unpatentable Andersson et al. (US 6,693,894 B1) in view of Bichot et al. (US 7,050,416 B2).

Consider **claims 2, 13**. Andersson teach the limitation of claim as discuss **but silent on** the method of claim 1, further comprising: registering the call forwarding service by adding a parameter having forwarding information including the second IP

address to packet service subscriber data transmitted from an HLR to an SGSN when the HLR changes the subscriber information stored in a database of the SGSN.

In an analogous art, Bichot teaches "Technique for IP communication among wireless devices". Further, **Bichot teaches** the method of claim 1, further comprising: registering the call forwarding service by adding a parameter having forwarding information to packet service subscriber data transmitted from an HLR to an SGSN when the HLR changes the subscriber information stored in a database of the SGSN (Abstract, C3, L20-47).

Therefore, it would have been obvious at the time that the invention was made that person having ordinary skill in the art to modify Andersson and Bichot system, such that transmitted data/information from an HLR to an SGSN and information stored in a database of the SGSN to provide means for security of keeping record information of subscriber.

Consider **claim 3**. Bichot teaches the method of claim 1, wherein the determining is performed at an HLR that received a called subscriber routing information request (C3, L26-34).

Consider **claim 4**. Bichot teaches the method of claim 1, further comprising when the called subscriber is determined to have subscribed to the call forwarding service and set up the call-forwarding unconditional function: transmitting from an HLR to a Gateway General Packet Radio Service (GPRS) Service Node (GGSN) first routing

Art Unit: 2617

information for setting up the packet call directed to the IP address of the called subscriber and forwarded to the forward to the second IP address (C2, L10-24, C3, L20-47).

Consider **claim 5**. Andersson teaches the method of claim 4, wherein the first routing information includes forwarding information, in a case where the called subscriber subscribes to the call forwarding service (C3, L5-20, Fig.2, No.204).

Consider **claims 8-9, 17**. Andersson teaches the method of claim 2, wherein the second IP address includes at least one of a previously designated URL address, a certain server address and another mobile station address (C3, L45-63, Fig.3, Illustrate and described).

Consider **claims 11, 20**. Andersson teaches the method of claim 1, wherein the setting up comprises: transmitting first routing information including forwarding information from a first HLR to a GGSN; and checking forwarding information from the received first routing information, wherein in a case where setting up the packet call forwarded to another mobile station is impossible according to a result of said checking, setting up a forwarded packet call by routing the packet call using internet network according to the received forwarding information (Abstract, C8, L23-31).

Consider **claim 14**. Bichot teaches the method of claim 12, wherein the determining step is performed at an SGSN which pages a mobile handset of the called subscriber (Fig.1, Illustrate and described).

Consider **claims 15, 19**. Bichot teaches the method of claim 12, wherein when the called subscriber subscribes to the call forwarding service, an SGSN transmits to a GGSN information including forwarding information for setting up a packet call directed to the first IP address of the called subscriber and forwarded to forward to the second IP address (C3, L25-47, C4, L11-39).

Consider **claim 18**. The method of claim 15, wherein the information including forwarding information comprises information indicating that there is no response from the called subscriber, when the called subscriber is a subscriber of the call forwarding service (Official notice limitation is well know, when call to number ring no answer and call is forwarding to selected destination).

Consider **claims 23, 32**. Andersson teaches the method of claim 21, wherein the forwarding address is one of a predetermined URL address, a predetermined server address, or an address corresponding to another mobile terminal (C3, L64-67, C4, L1-28).

Art Unit: 2617

5. **Claims 24-28, 33-38** are rejected under 35 U.S.C. 103(a) as being unpatentable Andersson et al. (US 6,693,894 B1) in view of Bichot et al. (US 7,050,416 B2) and further view of MacNamara et al. (US 2004/0203678 A1).

Consider **claims 24, 28, 33, 37**. Andersson and Bichot teaches the limitations of claim as discuss above **but silent on** the method of claim 21, wherein the forwarding is performed unconditionally,

In an analogous art, MacNamara teaches "Method for effecting fast forward no-answer treatment for wireless or wireline calls". Further, **MacNamara teaches** the method of claim 21, wherein the forwarding is performed unconditionally (Abstarct, Paragraph [0004] teach call fast forwarding call no answer means as forwarding is performed unconditionally).

Therefore, it would have been obvious at the time that the invention was made that person having ordinary skill in the art to modify Andersson and Bichot system such that forwarding is performed unconditionally to provide means for the users able to received call when ever he/she not available to pick up or answer call in different location.

Consider **claims 25, 34**. MacNamara teaches the method of claim 21, further comprising: sending a paging signal the mobile subscriber terminal, wherein the forwarding step is performed only when no response is received from the paging signal (Paragraphs [0004-0005], Fig.2, Illustrate and described).



Consider **claims 26, 35**. MacNamara teaches the method of claim 21, further comprising: determining whether the mobile terminal subscriber is a subscriber of a call-forwarding service, wherein the forwarding step is performed based on a result of the determining step ([0020-0023] Fig.2, Illustrate and described).

Consider **claims 27, 36**. MacNamara teaches the method of claim 26, further comprising: determining a type of call-forwarding service of the mobile terminal subscriber; and forwarding the call based on the type of call-forwarding service (Paragraphs [0020-0023]).

Consider **claims 29, 38**. MacNamara teaches the method of claim 28, wherein the type of call-forwarding service is one where calls are forwarded to the forwarding address after no response has been received from a paging signal for a predetermined period of time (Paragraphs [0020-0022]).

### ***Conclusion***

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within

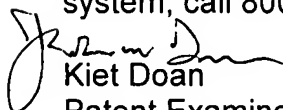
Art Unit: 2617

TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kiet Doan whose telephone number is 571-272-7863. The examiner can normally be reached on 8am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph H. Feild can be reached on 571-272-4090. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
Kiet Doan  
Patent Examiner

  
JOSEPH FEILD  
SUPERVISORY PATENT EXAMINER